

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A medical device, comprising:
a balloon comprising:
a first portion having a first length; and
a second portion disposed on a selected portion of the first portion, the second portion having a second length, wherein the second portion defines an outer surface of the balloon;
wherein the first portion varies in thickness along the first length and the second portion varies in thickness along the second length,
wherein the balloon has a waist portion, a body portion and a cone portion and wherein the first portion has a greater thickness at the body portion than at the cone portion, and wherein the first portion has a greater thickness at the cone portion than at the waist portion.
2. (Original) The device of claim 1, wherein the first and second portions have different compositions.
3. (Original) The device of claim 1, wherein the first portion extends substantially the entire length of the balloon.
4. (Original) The device of claim 1, wherein the first and second portions have different hardness.
5. (Original) The device of claim 1, wherein the second portion is softer than the first portion.
- 6-7. (canceled)

8. (Original) The device of claim 1, wherein the second portion is disposed substantially entirely on the first portion.

9. (Withdrawn) The device of claim 1, wherein the balloon has a body portion defined substantially entirely by the first portion.

10. (Previously presented) The device of claim 1, wherein the thickness of the first portion is generally constant in the cone portion.

11. (Withdrawn) The device of claim 1, wherein the balloon has a cone portion, and the thickness of the first portion varies over a portion of the cone portion.

12. (Previously presented) The device of claim 1, wherein the thickness of the second portion is generally constant in the cone portion.

13. (Withdrawn) The device of claim 1, wherein the balloon has a cone portion, and the thickness of the second portion varies over a portion of the cone portion.

14. (Canceled)

15. (Withdrawn) The device of claim 1, wherein the portions vary continuously in thickness along the length of the balloon.

16. (Withdrawn) The device of claim 1, wherein one of the portions includes a step-wise change in thickness along the length of the balloon.

17. (Previously presented) The device of claim 1, wherein the cone portion is more flexible than the body portion.

18. (Withdrawn) The device of claim 1, wherein the balloon has a proximal portion and a distal portion that is more flexible than the proximal portion.

19. (Withdrawn) A medical device, comprising:

a balloon comprising

a first portion; and

a second portion disposed on a selected portion of the first layer, the second portion varying in thickness.

20. (Withdrawn) The device of claim 19, wherein the second portion is softer than the first portion.

21. (Withdrawn) The device of claim 19, wherein the first and second portions have different hardness.

22. (Withdrawn) The device of claim 19, wherein the balloon has a body portion and a cone portion, and the second portion is thinner on the body portion than on the cone portion.

23. (Withdrawn) The device of claim 19, wherein the balloon has a body portion substantially free of the second portion.

24. (Withdrawn) The device of claim 19, wherein the balloon has a body portion and a cone portion that is more flexible than the body portion.

25. (Withdrawn) The device of claim 19, wherein the first portion extends substantially the entire length of the balloon.

26. (Withdrawn) The device of claim 19, wherein the second portion extends substantially the entire length of the balloon.

27-38. (canceled)

39. (Withdrawn) A method of making a medical device, comprising:
forming a tube comprising a first layer and a second layer, the first layer varying in thickness; and
forming the tube into a medical balloon.

40. (Withdrawn) The method of claim 39, wherein the tube is extruded.

41. (Withdrawn) The method of claim 39, wherein forming the tube into the medical balloon comprises blow molding.

42. (Withdrawn) The method of claim 39, wherein the second layer varies in thickness.

43-47. (canceled)

48. (New) A balloon catheter, comprising:
a catheter shaft having a longitudinal axis;
a balloon attached to catheter shaft, the balloon including an inner layer and an outer layer;

wherein the balloon has a proximal waist attached to the catheter shaft, a proximal cone portion extending radially outward from the proximal waist, a body portion extending substantially parallel to the longitudinal axis of the catheter shaft, a distal cone portion extending radially inward from the body portion, and a distal waist attached to the catheter shaft;

wherein the inner layer has a first thickness along the proximal waist;

wherein the inner layer has a second thickness along the proximal cone portion;

wherein the inner layer has a third thickness along the body portion;

wherein the third thickness is greater than the second thickness; and

wherein the second thickness is greater than the first thickness.